

# Green River System Wide Improvement Framework (SWIF)

## Vision, Goals and Objectives

**\*\***This document summarizes foundation principles guiding the development of the Green River SWIF. Preparation of this document has fostered discussion and clarity regarding the purpose of the SWIF and its desired outcomes. This version of the document reflects input from the project's Technical Advisory Committee and Advisory Council members. The Green River SWIF vision and goals and objectives were approved by the King County Flood Control District on January 27, 2014. It is anticipated that the document may be updated, as needed, during the project.

### Vision Statement

- Improve flood protection, for current and future generations, in a way that builds economic, ecological and community resiliency.

### SWIF Goals and Objectives

#### SWIF Goal – Integrated River and Floodplain Management

Reach agreement on an integrated list of multi-objective, prioritized projects and non-regulatory, programmatic actions that achieve the Green River SWIF's agreed to goals for level of protection from flooding. This integrated set of flood protection strategies and actions shall: improve water temperature; advance progress towards meeting salmon protection and recovery goals; enhance open space, recreation, treaty fishing, and public access; support farmland protection, resiliency and productivity; and reduce long-term facility maintenance costs.

Associated objectives include:

- Identify prioritized capital projects that advance progress towards achieving flood protection goals, established through the Green River SWIF Project, for specific portions of the Lower Green River shoreline
- Evaluate long-term maintenance and life cycle costs of prioritized projects

#### SWIF Goal – Flood Protection

Define a desired level of protection based on the likely consequences of flooding to public safety, infrastructure, current and future economic development, and estimated costs of capital projects, maintenance, lost ecosystem services, and costs and duration of disaster recovery in the event of levee overtopping or failure. Associated objectives include:

- Develop scenarios for levels of protection and associated costs and benefits and use to inform recommendation on desired level of protection
- Manage the Lower Green River and its floodplain to achieve a defined level of protection and reduce flood risks for current and future generations
- Ensure Green River levees meet modern structural or agreed upon design standards, in support of achieving identified level of protection goals and to obtain and maintain current FEMA levee certification/accreditation requirements, where appropriate.
- Evaluate options to increase Howard Hanson Dam storage capacity, while still enabling restoration of downstream fish passage
- Identify programmatic actions (e.g., flood warning, emergency evacuation) to complement project actions to address residual risks and strengthen the awareness and preparedness of the community, people, residents and businesses of the Lower Green River Valley.

### **SWIF Goal – Vegetation Management**

Develop shoreline and levee vegetation management recommendations to further the goals of the Endangered Species Act (ESA), Clean Water Act (CWA), and Corps PL84-99 standards. Associated objectives include:

- Evaluate the potential for USACE approval of a PL84-99 vegetation variance sufficient to address water temperature standards in the lower river.
- Identify and assess conflicts between ESA, CWA and PL84-99, including their associated costs
- Assess the costs and benefits of PL 84-99 eligibility for repair and rehabilitation of the individual Lower Green levee systems compared to relying primarily on locally-funded maintenance and repair alternatives.
- Develop a vegetation management strategy and set of specifications for flood risk reduction facilities to reduce water temperature and improve salmon habitat

### **SWIF Goal – Ecological Resiliency**

Improve the ecological resiliency of the Lower Green River's aquatic and terrestrial habitats through implementation of the Green River SWIF's priority projects and non-regulatory, programmatic recommendations. Associated objectives include:

- Identify salmon habitat protection and restoration project priorities that also advance flood protection goals
- Identify a prioritized list of flood protection projects that improves water temperature as well as migration and spawning conditions needed to sustain salmon and help meet treaty, fishing and salmon recovery goals
- Identify opportunities to enhance vegetation conditions and potential groundwater reconnection opportunities to meet state water temperature standards in the lower Green River.
- Evaluate impacts of facility maintenance on salmon recovery and habitat

### **SWIF Goal – Economic Resiliency**

Improve the resiliency of the economic base of the Lower Green River Valley through implementation of the Green River SWIF's priority projects and non-regulatory, programmatic recommendations. Associated objectives include:

- Provide greater certainty for landowners and businesses about future level of flood protection, residual flood risk, and flood hazard designations and regulations that will be applied in flood hazard areas.  
Associated objectives include:
- Establish clear flood protection goals that property owners, businesses, and local governments can use to assess risk and guide future investments, including a better understanding of the availability and affordability of flood insurance
- Work with federal agencies to integrate assessment of facility conditions, planned capital improvements, and level of flood protection, developed through the Green SWIF, with future flood hazard mapping and hazard designations
- Provide certainty that vegetation management priorities and other approaches to achieving flood protection goals, developed through the Green SWIF, will meet federal ESA and CWA requirements
- Improve regulatory alignment and certainty

### **SWIF Goal – Community Resiliency**

Improve the resiliency of communities in the vicinity of the Lower Green River through implementation of the Green River SWIF's priority projects and non-regulatory, programmatic recommendations. Associated objectives include:

- Understand current and future level of flood protection and residual risk given current dam capacity and existing flood protection facilities
- Identify opportunities to achieve level of flood protection goals in a manner that is mutually supportive of recreational trails, parks, and open space protection